

«EVCC-DC-003»

**DC controller for charging electric vehicles with
interface «CHAdemo»**



**«Autoenterprise»
Ukraine**

Specifications

- Current Sensor Support "LEM" and "TAMURA"
- Integrated energy meter
- Support of CAN and RS485 interfaces for communication with DC power modules
- Support for operator panel "RS485"
- Implemented circuit integrity control connector lock control
- Monitoring the integrity of the insulation of the high voltage cable (IMD insulation monitoring device)

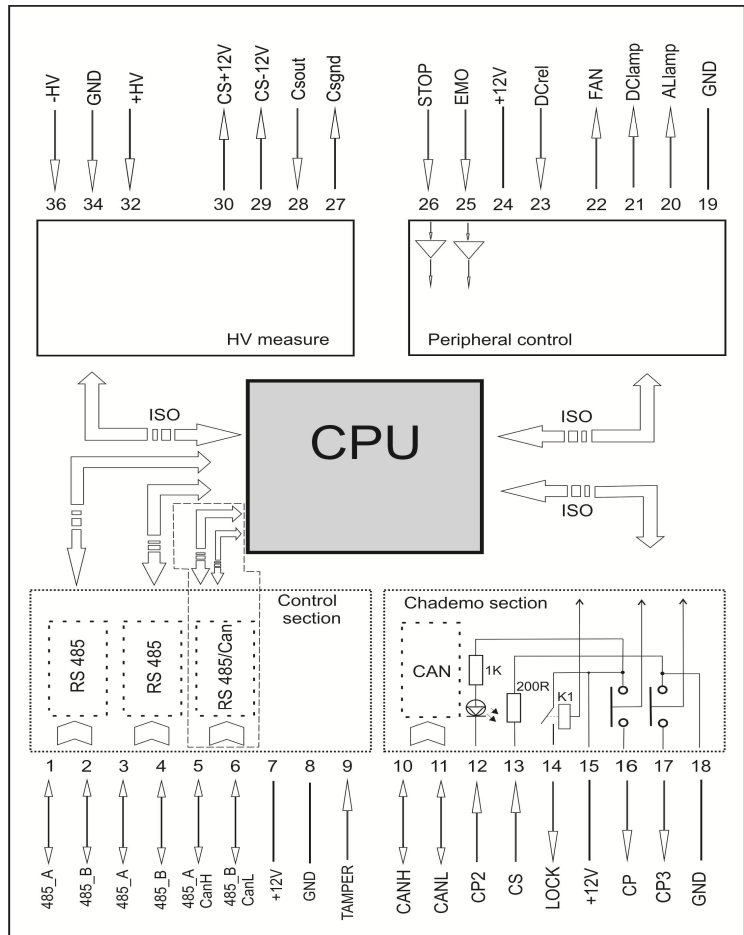
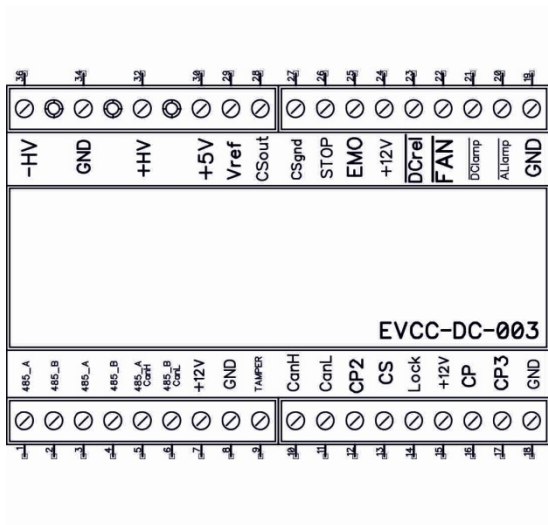
"EVCC-DC-003" - multifunctional controller, which is made using effective solutions based on modern components, using microcontroller signal processing technology, which ensures high efficiency, functionality and reliability of the charger.

Together with software and accessible interfaces, it provides a productive solution for charging electric vehicles that meets the highest quality standards.

The product is designed to control the conversion of energy consumed from a 380V three-phase AC network into a DC voltage for charging an electric vehicle in accordance with the requirements of the "CHAdeMO" interface.

The product is equipped with an intelligent control system based on the "STM32" microcontroller and communication devices that exchange information with the electric vehicle and set the value of current and charge voltage, in accordance with the need of the electric vehicle in real time.

Block diagram and assignment of controller pins EVCC-DC-003



Control Section

1,2	RS-485	Host device	
3,4	RS-485	Information display	
5,6	RS-485/CAN	Power Supply Module Management	
7	+ 12	+12 V power bus	max 0,3 A
8	GND	Common Power Bus	
9	TAMPER	Door open sensor	

Chademo section

10,11	CAN	CAN interface CHAdEMO	
12	CP2		12 mA
13	CS		12 mA
14	Lock	Lock Lock Management	
15	+ 12	+12 V power bus CHAdEMO section	
16	CP		
17	CP3		
18	GND	Common Power Bus	

Peripheral control

19	GND	Common Power Bus	
20	ALLamp	Station Error Indicator	
21	DClamp	Charge indicator	
22	FAN	Enabling forced cooling	max 1 A, 24 V.
23	DCrel	High voltage relay	
24	+ 12V	+12 V power bus	
25	EMO	ZU emergency stop button	
26	STOP	Charge completion button	

Hi volt measure

27	CSgnd	Common current sensor	
28	CSout	Current sensor output	
29	CS -12V	Negative current sensor power	max 30 mA
30	CS +12V	Positive power current sensor	max 30 mA
32	+ HV	Positive High Voltage Measurement Input	
34	GND	Common Power Bus	
36	-HV	Negative high-voltage potential input	

[illegible]

- battery life;
- GSM-modem model "EVCC-GSM-003".

It is recommended to use DC modules as a source of constant voltage, which are designed to convert 3-phase alternating voltage of 380V to a constant voltage of 200 V to 750V and with control via the communication CAN or RS-485 - Kehua model EV3751-020K-HR ", " PRE "model" 11 kWa "and " Seatec ".